

CLAIM AMENDMENTS

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Withdrawn and Currently Amended) A method of enhancing the effect of lysophospholipid on a cell, comprising:
introducing a gene that encodes G protein-coupled protein p2y9 into a [the] cell; and
assaying a lysophospholipid activated response of the cell, selected from the group consisting of stimulation of cell proliferation, recovery of damaged tissue, retraction of neurite essential to the maturation of neuron, smooth muscle contraction, platelet aggregation, suppression of cell apoptosis and promotion of cellular chemotaxis in response to inhibitors of p2y9 dependent LPA activity, wherein the ~~p2y2~~ p2y9 protein comprises an amino acid sequence that is more than 95% homologous with SEQ ID NO: 1.
5. (Cancelled)
6. (Withdrawn and Previously Presented) The method of claim 4, wherein p2y9 has the amino acid sequence of SEQ ID NO: 1.
7. (Withdrawn and Previously Presented) A method of screening a test compound for activating a physiological response affected by lysophosphatidic acid comprising the method of claim 4, further comprising the step of adding the test compound.

8. (Withdrawn and Original) The method according to claim 7, wherein the method is to screen the antagonist in use for carcinoma cell invasion.
9. (Cancelled)
10. (Withdrawn and Currently Amended) A method of enhancing the effect of lysophospholipid on a cell, comprising:
introducing a gene that encodes G protein-coupled protein p2y9 into a [the] cell; and
assaying a lysophospholipid activated response of the cell, the response selected from the group consisting of: stimulation of cell proliferation, recovery of damaged tissue, retraction of neurite essential to the maturation of neuron, smooth muscle contraction, platelet aggregation, suppression of cell apoptosis and promotion of cellular chemotaxis, wherein the p2y9 protein comprises an amino acid sequence having a sequence identity of more than 95 % to the amino acid sequence of SEQ ID NO: 1 and wherein the substances comprise inhibitors of p2y9 dependent LPA activity.
11. (Withdrawn and Previously Presented) The method of claim 10, wherein the step of assaying the response comprises adding a lysophospholipid to the cell's medium.
12. (Withdrawn and Previously Presented) The method of claim 11, wherein the lysophospholipid is 1-acyl-LPA.
13. (Withdrawn and Previously Presented) The method of claim 10, wherein the ~~p2y2~~ p2y9 protein comprises an amino acid sequence represented by SEQ ID NO: 1 or an allelic variant thereof.
14. (Withdrawn and Previously Presented) A method of assaying lysophospholipid in a sample, comprising measuring the response of G protein-coupled protein p2y9 according to the

method of claim 10, and comparing said response with that obtained from a known lysophospholipid quantity.

15. (Withdrawn and Previously Presented) A method of detecting ovarian cancer by detecting LPA in plasma using G protein-coupled protein p2y9 that comprises an amino acid sequence having a sequence identity of at least 95 % with the amino acid sequence of SEQ ID NO:1 and wherein the p2y9 protein has LPA receptor activity.
16. (Withdrawn and Currently Amended) A method of determining the level of LPA in a sample, comprising monitoring binding of the test samples to G protein-coupled protein p2y9 by measuring the response of G protein-coupled protein p2y9s expressed on the cell surface to LPA, wherein the p2y9 protein comprises a sequence with at least a 95% sequence identity with SEQ ID NO: 1 and the protein has LPA receptor activity; wherein the substances comprise inhibitors of p2y9 dependent LPA activity.
17. (Currently Amended) A method of screening ~~substances~~ a candidate compound in test samples that enhance or inhibit ~~LPA p2y9~~ dependent LPA activity, comprising monitoring binding of the test samples to G protein-coupled protein p2y9, wherein the p2y9 protein comprises an amino acid sequence having a sequence identity of more than 95 % to the amino acid sequence of SEQ ID NO:1; comprising the steps of:
 - (a) preparing cells that express the G protein-coupled protein p2y9 on the cell surfaces;
 - (b) adding LPA to the cell surfaces;
 - (c) monitoring a physiological activity associated with binding of LPA to p2y9;
 - (d) isolating cells that exhibit the physiological activity;
 - (e) adding the test samples to the cells obtained in step (d);
 - (f) monitoring a physiological activity of the cells; and
 - (g) determining whether a test sample affects binding of LPA to p2y9.

18. (Canceled) ~~The method of claim 17, wherein the substances are inhibitors of LPA dependent LPA activity and are further screened for effects on carcinoma cell invasion.~~
19. (New) The method according to claim 17, wherein the step of monitoring the physiological activity is carried out by detecting calcium concentration in the cells.
20. (New) The method according to claim 17, wherein the step of monitoring the physiological activity associated with binding of LPA to p2y9 comprises detecting cAMP concentration in the cells.
21. (New) The method according to claim 17, wherein the candidate compound is an inhibitor of carcinoma cell invasion.